| In | idex of | Claims |  |
|----|---------|--------|--|
|    |         |        |  |

| Application/Control No. | Applicant(s)/Patent under Reexamination |  |
|-------------------------|---|--|
| 09/781,059              | CHIKAZAWA ET AL.                        |  |
| Examiner                | Art Unit .                              |  |
| Ian N. Moore            | 2616                                    |  |

| 7  | Rejected |  |
|----|----------|--|
| 11 | Allowed  |  |

| - | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| ı | Interference |

| A | Appeal   |
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| 0 | Objected |

|          | <del></del> |  |              |          |          |          |              |  |  |  | 1 1 | -     |          | 1  |   |   |               |  |  |  |          |           |
|----------|-------------|--|--------------|----------|----------|----------|--------------|--|--|--|-----|-------|----------|--|---|---|---------------|--|--|--|----------|-----------|
| Cla      | aim         | <u> </u>   | _            | _        | _[       | Date     | 9            | T  | _  | _  |     | Cla   | ıım      | <del>                                     </del> | _ |   | _[            | Date   | e_   |  | · · ·    | H         |
| Final    | Original    | 8/12/04  | 4/16/05      | 9/25/06  | 2/16/07  |          |              |  |  |  |     | Final | Original |  |   |   |               |  |  |  |          |           |
| 1        | 1           | 1  | 1            | 0        | u        |          |              |  |  |  |     |       | 51       |  |   |   |               |  |  |  |          |           |
| 2        | 2           | V  | 1            | =        | =        |          |              |  |  |  |     |       | 52       |  |   |   |               |  |  |  |          |           |
| 6        | 3           | 0  | 0            | 0        | #        |          |              |  |  |  |     |       | 53       |  |   |   |               |  |  |  |          | Ш         |
| 7        | 4           | 0  | 0            | =        | =        |          |              | <u> </u>   | <u> </u>   | <u> </u>   |     |       | 54       |  |   |   |               | L  | L  |  | _        | Ш         |
| 8        | 5           | 0  | 0            | =        | "        |          |              | L  |  |  | ]   |       | 55       |  |   |   |               |  |  |  |          |           |
| 9        | 6           | 0  | 0            | =        | =        |          |              |  |  | <u></u>  |     |       | 56       |  |   |   |               |  | L  | <u> </u>   |          | Ш         |
| 10       | 7           | 0  | 0            | =        | n        | L        | L            |  |  | L  |     |       | 57       | Ш  |   |   |               | L  | L  |  | _        | Ш         |
| 11       | 8           | 0  | 0            | =        | "        | <u> </u> |              | L.   | <u> </u>   | <u></u>  |     |       | 58       |  |   |   |               | <u> </u>   |  |  |          | Ш         |
| 12       | 9           | 0  | 0            | =        | =        |          | <u> </u>     |  |  | 匚  |     |       | 59       | Ш  |   |   |               |  |  | <u> </u>   | L.       | Ш         |
| 13       | 10          | 0  | 0            | =        | 9        |          | _            | _  | ļ.,  |  |     |       | 60       | Ш  |   |   |               | <u> </u>   |  | <u> </u>   |          | Ш         |
| 14       | 11          | 0  | 0            | =        | =        |          | _            | 乚  | ┖  | _  |     |       | 61       | Ш  |   |   |               | <u> </u>   |  | 1  | <u> </u> | Ш         |
| 15       | 12          | 0  | 0            | =        | =        | <u> </u> |              | <u> </u>   | <u> </u>   | _  |     |       | 62       | Ш  |   |   | ļ             | ļ  |  | <u> </u>   |          | Ш         |
| 16       | 13          | 0  | 0            | 0        | =        | <u> </u> | <u> </u>     | ㄴ  | <u> </u>   | <u> </u>   | l i |       | 63       | Ш  |   |   | _             | <u> </u>   | _  | <u> </u>   | _        | Ш         |
| 17       | 14          | 0  | 0            | =        | =        | <u> </u> | <u> </u>     | ┞  | ┡  | <u> </u>   |     |       | 64       | $\square$  |   |   |               | <u> </u>   |  | <u> </u>   | <u> </u> | Н         |
| 18       | 15          | 0  | 0            | =        | =        | <u> </u> | <u> </u>     | ┞  | <u> </u>   | <u> </u>   |     |       | 65       |  |   |   |               | <u> </u>   | _  | ┞  |          | Н         |
| 3        | 16          | 0  | 0            | =        | =        |          | <u> </u>     | ļ.,  | -  | <u> </u>   |     |       | 66       |  |   |   |               | _  | ļ  | <u> </u>   | _        | Н         |
| 4        | 17          | _  | 1            | =        | =        | <u> </u> | ļ            | ├-   | <u> </u>   | L  |     |       | 67       |  |   |   | -             | <u> </u>   | _  | <u> </u>   | -        | Н         |
| 5        | 18          | _  | 0            | =        | =        | <u> </u> | <u> </u>     | -  | -  |  |     |       | 68       | Н  |   |   |               | ├  | _  | ├-   |          | $\vdash$  |
|          | 19          |  |              | <u> </u> | _        | <u> </u> | <u> </u>     | _  | ⊢  | ⊢  | 1   |       | 69       | $\vdash$   |   |   |               |  |  | -  | -        | Н         |
|          | 20          |  | _            |          |          | ┡        | <u> </u>     | ļ  | -  | ├-   |     |       | 70       | $\vdash$   |   |   | _             | <u> </u>   |  | <del> </del>                                     |          | Н         |
| <u> </u> | 21          | _  | _            | _        |          | _        | <u> </u>     | ļ  | <del> </del>                                     | <u> </u>   |     |       | 71       | -  |   |   |               | <u> </u>   | _  |  |          | $\vdash$  |
|          | 22          | _  | ╙            | <u> </u> |          | ļ        | <u> </u>     | ├  | ╀  | ⊢  |     |       | 72       |  |   |   | -             | <u> </u>   | ⊢  | ⊢  |          | $\vdash$  |
| <u> </u> | 23          | _  | <u> </u>     |          |          | <u> </u> | <del> </del> | ├  | ⊢  | H  |     |       | 73<br>74 | $\vdash$   |   |   | _             | _  |  | ┢  | -        | Н         |
|          | 24          |  | -            | ⊢        |          | <u> </u> | ⊢            | ⊢  | ⊢  | ├  | 1   |       |          | $\vdash$   |   |   |               | _  |  | ┢  |          | Н         |
|          | 25          | ⊢  | ⊢            | ⊢        |          | $\vdash$ | <del> </del> | ├  | -  | -  | 1   |       | 75<br>76 | Н  |   |   |               | -  |  | ├  |          | Н         |
|          | 26<br>27    | <u> </u>   | $\vdash$     | $\vdash$ | _        | ├        | ┝            | $\vdash$   | ├  |  | -   |       | 77       | Н  |   |   |               | -  |  | ⊢  | -        | H         |
| <b>├</b> | 28          | _  | <u> </u>     | -        |          | ├        | ├            | ⊢  | ├  | ┝  | 1   |       | 78       | $\vdash$   |   | _ |               | ┝  | ┢  | ┢  | -        | Н         |
| -        | 29          | ⊢  | ├            | -        |          | ┢        | -            | ├  | ┢  | ⊢  | 1   |       | 79       | $\vdash$   |   |   | _             | ├  | ├  | ├  |          | ┝─┤       |
|          | 30          | ┢  | $\vdash$     | -        | $\vdash$ | ⊢        | ┝            | ╁╌   | ├  | ┝  | 1   |       | 80       | $\vdash \vdash$                                  |   | _ |               |  | ├  | ⊢  | $\vdash$ | Н         |
| <u> </u> | 31          | ⊢  | $\vdash$     | $\vdash$ | $\vdash$ | ├-       |              | ┢  | ┢  | ⊢  | 1   |       | 81       | Н  |   |   | _             |  | ┢┈   | ┢╌   |          | $\vdash$  |
| $\vdash$ | 32          | ⊢  | ├            | -        | $\vdash$ | -        | -            | ╁╌   | ┢  | ┢  | 1   |       | 82       |  |   |   | -             | $\vdash$   | $\vdash$   | ┢  |          | $\vdash$  |
| $\vdash$ | 33          | ┢╾   |              |          | $\vdash$ | ⊢        | $\vdash$     | $\vdash$   | $\vdash$   | ⊢  | 1 ' |       | 83       | $\vdash$   |   | _ | _             | $\vdash$   | $\vdash$   | <del>                                     </del> |          | Н         |
| _        | 34          | $\vdash$   | ⊢            | -        | $\vdash$ | ┢        | -            | ╁  | ╁  | -  | 1   |       | 84       | Н  |   |   |               | -  |  | ╁  | -        | Н         |
|          | 35          | $\vdash$   | ┢            | _        | $\vdash$ | $\vdash$ | $\vdash$     | <del>                                     </del> | ┼─   | $\vdash$   | 1   |       | 85       | Н  |   |   | _             | <del>                                     </del> | -  |  |          | H         |
| -        | 36          | $\vdash$   | $\vdash$     |          | _        | -        | -            | -  | ╁  | $\vdash$   | 1   |       | 86       |  |   |   |               | -  | _  | 1  |          | Н         |
| $\vdash$ | 37          | -  | <del> </del> | -        | $\vdash$ | $\vdash$ | $\vdash$     | H  | $\vdash$   | $\vdash$   | 1   | _     | 87       | $\vdash$   | _ |   | $\vdash$      | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$ | H         |
| -        | 38          | $\vdash$   | $\vdash$     |          | $\vdash$ | $\vdash$ | $\vdash$     | <del>                                     </del> | <del> </del>                                     | -  | 1   |       | 88       | $\vdash \vdash$                                  | _ |   | _             |  | <del>                                     </del> | <del> </del>                                     |          | Н         |
| <b></b>  | 39          | $\vdash$   | $\vdash$     |          |          | $\vdash$ | $\vdash$     | 1  |  | <del>                                     </del> | 1   |       | 89       | Н  | _ |   | _             | <del>                                     </del> | T  | T  |          | $\square$ |
|          | 40          | T  | $\vdash$     | $\vdash$ | Т        | $\vdash$ | <u> </u>     | T  | <del>                                     </del> | <del>                                     </del> | 1   |       | 90       | $\Box$   |   |   | Т             | $\vdash$   | П  |  |          | $\Box$    |
|          | 41          | <del>                                     </del> | $\vdash$     | Г        | Г        | Т        | ┢            | T  | †  | ┢  | 1   |       | 91       | П  |   |   |               | $\vdash$   | T  |  | T        | М         |
|          | 42          | T  |              |          | $\vdash$ | $\vdash$ | $\vdash$     | Т  | <b>T</b>   | Г  | 1   |       | 92       | $  \neg  $                                       |   | _ |               | ┪  | Г  | T  |          | $\Box$    |
|          | 43          | <del>                                     </del> |              | <u> </u> | Г        | T        |              | Т  | T  |  | 1   |       | 93       | П  |   |   | _             |  | Γ  | T  | Г        | $\square$ |
| 1        | 44          | Т  | $\vdash$     |          |          | T        |              | 1  | 1  | Ι-   | 1   |       | 94       | П  |   |   | $\overline{}$ | $\vdash$   | 1  | T  | $\vdash$ | М         |
|          | 45          | <del>                                     </del> | $\vdash$     |          |          | Т        |              | T  | $\vdash$   | Т  | 1   |       | 95       | П  |   |   | $\Box$        | Г  |  | T  | Ι_       | $\Box$    |
|          | 46          |  | <b> </b>     | <u> </u> | T        | <u> </u> |              | 1  |  |  | 1   |       | 96       | П  |   |   |               | Г  | Г  | T  | П        | $\square$ |
| -        | 47          | T  |              |          | Г        | Г        |              |  | T  | Τ  | 1   |       | 97       |  |   |   |               | Γ  |  | T  | Π        | П         |
|          | 48          | Г  | Г            | Т        |          | <u> </u> | <u> </u>     |  |  |  | 1   |       | 98       | П  |   | _ | $\Box$        | Г  |  |  | Π        | П         |
|          | 49          | $\vdash$   | _            |          |          |          |              | Т  |  | Г  | 1   |       | 99       | П  |   |   |               |  |  |  |          |           |
|          | 50          | Г  |              |          | Π        |          |              |  | Π  | Π  | 1   |       | 100      |  |   |   |               |  |  |  |          |           |
|          |             |  |              |          |          | •        |              | _  |  | •  | •   |       |          |  |   |   |               |  |  | -  |          |           |

| Cla  | im                   |          |          |              | [            | Date         | =        |          |          |          |
|--|----------------------|----------|----------|--------------|--------------|--------------|----------|----------|----------|----------|
|  |                      |          |          |              |              |              |          |          |          |          |
| <u>a</u>   | na                   |          |          |              |              |              |          |          |          |          |
| Final  | Original             |          |          |              |              |              |          |          |          |          |
| -  | 0                    |          |          |              |              |              |          |          |          |          |
|  | 51                   |          |          |              | ┢╌           |              |          |          |          | $\vdash$ |
|  | 52                   | _        |          |              | $\vdash$     | $\vdash$     | -        |          |          | ┝┈       |
|  | 53                   | _        | -        |              | -            | $\vdash$     | $\vdash$ |          | -        |          |
| _  | 51<br>52<br>53<br>54 | _        | -        | <del> </del> | -            | <del> </del> | $\vdash$ |          | $\vdash$ | $\vdash$ |
|  | 55                   |          |          | $\vdash$     | ┢            | $\vdash$     | _        |          | _        | Н        |
|  | 56                   |          |          |              | <del> </del> | H            | _        |          | -        | -        |
|  | 57                   | _        |          | $\vdash$     | -            | -            |          |          |          | $\vdash$ |
|  | 58                   | _        |          |              | -            | -            | -        |          |          | $\vdash$ |
| <del>                                     </del> | 58<br>59             | -        | -        | -            | ┢            | $\vdash$     |          |          | _        |          |
|  | 60                   |          |          |              | -            | <u> </u>     | —        |          |          | -        |
|  | 61                   | _        |          | _            | ⊢            | -            | —        |          |          | -        |
| $\vdash$   | 62                   | Н        |          |              | <del> </del> |              | -        | H        | Н        | Н        |
| _  | 61<br>62<br>63       | -        |          |              | ┝            | $\vdash$     | $\vdash$ | Н        | Н        | Н        |
| <del> </del>                                     | 64                   | $\vdash$ |          |              | $\vdash$     | $\vdash$     | $\vdash$ | Н        | Н        | Н        |
| <b></b>  | 64<br>65             | —        | _        | $\vdash$     | $\vdash$     | $\vdash$     | $\vdash$ | Η-       | Н        | Н        |
|  | 66                   | _        |          |              | $\vdash$     | $\vdash$     | —        | Н        | Н        | Н        |
| <del>                                     </del> | 67                   | -        |          |              | -            | -            |          | $\vdash$ | Н        | Н        |
| <u> </u>   | 69                   |          | _        |              | -            | ┝            |          |          |          | Н        |
|  | 60                   |          |          |              |              | $\vdash$     | _        | _        |          | -        |
|  | 68<br>69<br>70<br>71 |          |          |              | -            |              |          | -        |          | H        |
| <u> </u>   | 70                   | _        |          |              | _            | $\vdash$     | _        | _        |          | $\vdash$ |
| <u> </u>   | 71                   |          |          |              | _            | -            | _        | -        |          |          |
|  | 72<br>73<br>74       |          | _        |              | _            | $\vdash$     | _        | _        |          | Н        |
|  | 73                   |          | _        |              | _            | _            |          | _        |          | Н        |
|  | 74                   |          | _        |              |              |              |          |          |          | Н        |
| ļ  | 75                   |          |          | _            | _            | -            |          | _        |          | Н        |
|  | 75<br>76<br>77       | _        | _        |              |              |              |          |          |          |          |
|  | 77                   |          |          | _            | _            | <u> </u>     | _        | _        |          | Н        |
| <u> </u>   | 78<br>79             |          |          | _            | <u> </u>     | -            |          |          |          |          |
| ļ  | 79                   | _        | _        | _            | <u> </u>     |              |          |          |          | Н        |
| ļ  | 80                   |          |          | <u> </u>     | <u> </u>     |              |          |          |          |          |
| <u> </u>   | 81                   |          |          |              | -            | _            |          |          |          |          |
| <u> </u>   | 82                   |          |          |              | _            | _            |          |          |          |          |
|  | 83                   |          | <u> </u> | <u> </u>     | <u> </u>     | <u> </u>     | <u> </u> | <u> </u> | -        | Н        |
|  | 84                   | $\vdash$ | <u> </u> | $\vdash$     | <u> </u>     | <u> </u>     | <u> </u> | ļ        | ļ        | Н        |
|  | 85                   |          |          | -            | <del> </del> |              |          | <u> </u> | <u> </u> | Н        |
|  | 86                   |          | <u> </u> |              | <u> </u>     |              | _        | <u> </u> | -        | $\vdash$ |
|  | 87                   | $\vdash$ | $\vdash$ | <u> — </u>   | <del> </del> |              |          | <u> </u> | <u> </u> | Н        |
|  | 88                   | _        | _        | <u> </u>     | <u> </u>     |              | <u> </u> | $\vdash$ | $\vdash$ | Н        |
| $\vdash$   | 89                   | <u> </u> | _        | -            | -            | $\vdash$     | $\vdash$ | Ь.       | <u> </u> |          |
|  | 90                   | <u> </u> | $\vdash$ | $\vdash$     | <u> </u>     | <u> </u>     |          |          | -        | $\vdash$ |
| ⊢—   | 91                   | _        |          | <b>-</b>     |              |              | <u> </u> | $\vdash$ | <u> </u> |          |
| <u> </u>   | 92                   | <u> </u> | ļ        | <u> </u>     | -            | <del> </del> | <u> </u> | <u> </u> | <u> </u> | Н        |
|  | 93                   |          |          | <u> </u>     | <u> </u>     | <u> </u>     |          |          | <u> </u> | <u> </u> |
|  | 94                   | <u> </u> |          | <u> </u>     | <u> </u>     | <u> </u>     | ļ        | <b> </b> | <u> </u> | $\vdash$ |
|  | 95                   | L.       |          | <u> </u>     | <u> </u>     | $\vdash$     | <u> </u> | <u> </u> | <u> </u> | Щ        |
|  | 96                   | <u> </u> | -        | _            | ļ            | <u> </u>     |          | _        | <u> </u> | Щ        |
|  | 97                   | Щ        | _        |              | <u> </u>     |              | <u> </u> | $\vdash$ | <u> </u> | Щ        |
| ļ  | 98                   | Ш        |          | <u> </u>     | <u> </u>     | <b> </b>     | L        |          | <u> </u> | $\vdash$ |
| ļ  | 99                   | Ш        | _        | <b> </b> _   | <u> </u>     | <u> </u>     | <u> </u> |          | <u> </u> | $\sqcup$ |
| 1  | 100                  | Ī        | Ī        | ı            | ı            | ı            | i i      | l .      | ı        | l i      |

| Claim Date   regin 2 0   101 102   103 104   105 106   107 108   109 110   111 112   113 114   115 116   117 118 |        |
|--|--------|
| 101<br>102<br>103<br>104<br>105<br>106<br>107<br>108<br>109<br>110<br>111<br>112<br>113<br>114                   |        |
| 102<br>103<br>104<br>105<br>106<br>107<br>108<br>109<br>110<br>111<br>111<br>112<br>113<br>114                   |        |
| 102<br>103<br>104<br>105<br>106<br>107<br>108<br>109<br>110<br>111<br>111<br>112<br>113<br>114                   |        |
| 104<br>105<br>106<br>107<br>108<br>109<br>110<br>111<br>112<br>113<br>114  |        |
| 105<br>106<br>107<br>108<br>109<br>110<br>111<br>112<br>113<br>114<br>115  |        |
| 107<br>108<br>109<br>110<br>111<br>112<br>113<br>114   |        |
| 107<br>108<br>109<br>110<br>111<br>112<br>113<br>114   |        |
| 108<br>109<br>110<br>111<br>112<br>113<br>114  |        |
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| 132  | +      |
| 133<br>134   | +      |
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| 137  | 工      |
| 138  | +      |
| 139  |        |
| 141  | +      |
| 142  |        |
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| 145  | +      |
| 146  |        |
| 148  | -      |
| 149  |        |
| 150  |        |